

Name: \_\_\_\_\_

**p1106: Solve by factoring (v18)**

1. Solve the equation

$$x^2 - 11x + 18 = 0$$

$$(x - 2)(x - 9) = 0$$

$$x = 9$$

$$x = 2$$

2. Solve the equation

$$x^2 + 5x - 6 = 0$$

$$(x + 6)(x - 1) = 0$$

$$x = 1$$

$$x = -6$$

3. Solve the equation

$$2x^2 - 5x - 39 = x^2 - 8x + 1$$

$$x^2 + 3x - 40 = 0$$

$$(x - 5)(x + 8) = 0$$

$$x = -8$$

$$x = 5$$

4. Solve the equation

$$3x^2 + 2x - 44 = 2x^2 - 2x + 1$$

$$x^2 + 4x - 45 = 0$$

$$(x + 9)(x - 5) = 0$$

$$x = 5$$

$$x = -9$$

5. Solve the equation

$$9x^2 + 17x + 45 = 8x^2 + 4x + 5$$

$$x^2 + 13x + 40 = 0$$

$$(x + 5)(x + 8) = 0$$

$$x = -8$$

$$x = -5$$

6. Solve the equation

$$5x^2 + 39x - 54 = 0$$

$$(5x - 6)(x + 9) = 0$$

$$x = -9$$

$$x = \frac{6}{5}$$

7. Solve the equation

$$3x^2 - 10x - 48 = 0$$

$$(3x + 8)(x - 6) = 0$$

$$x = 6$$

$$x = \frac{-8}{3}$$

8. Solve the equation

$$12x^2 - 38x - 63 = 7x^2 + x - 9$$

$$5x^2 - 39x - 54 = 0$$

$$(5x + 6)(x - 9) = 0$$

$$x = 9$$

$$x = \frac{-6}{5}$$

9. Solve the equation

$$10x^2 - 25x - 39 = 7x^2 - 2x - 3$$

$$3x^2 - 23x - 36 = 0$$

$$(3x + 4)(x - 9) = 0$$

$$x = 9$$

$$x = \frac{-4}{3}$$

10. Solve the equation

$$10x^2 - 14x - 17 = 3x^2 - 4x - 9$$

$$7x^2 - 10x - 8 = 0$$

$$(7x + 4)(x - 2) = 0$$

$$x = 2$$

$$x = \frac{-4}{7}$$